

**FINDING OF NO SIGNIFICANT IMPACT
FOR
Orni 42 and Orni 49 Hot Sulphur Springs Transmission Line and Access Road
BLM/EK/PL-2008/010 and DOE/EA 1849
ROW Applications NVN-89518 and NVN-89982**

I have reviewed Environmental Assessments **BLM/EK/PL-2008/010 (March 2008) and DOE/EA 1849 (July 2011)**. After consideration of the environmental effects as described in the EAs, and incorporated herein, I have determined that the proposed action with the project design specifications (environmental protection measures) identified in the EA will not significantly affect the quality of the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

ORNI 42 and ORNI 49 applied for a single Right-of-Way that includes the transmission line and a related 2.5 mile access road. I have determined that two Right-of-Ways will be required, in-part because the transmission line and access road are not located entirely within the same corridor and in-part because they serve independent purposes, meaning in this case, that the purpose of the access road is not too serve for maintenance of the transmission line, but rather to serve as an access road to the geothermal plant.

The transmission line and access road impacts are fully described in the two EAs and maps contained therein accurately show the proposed locations of the transmission line and access road. Therefore the switch from one ROW to two ROWs is a minor administrative detail that does not require any additional analysis.

I have determined the proposed action is in conformance with the approved Elko Resource Management Plan and is consistent with the plans and policies of neighboring local, county, state, tribal and federal agencies and governments. This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA.

Context: The project area is located in Elko County at the northern end of Independence Valley, about 42 miles northwest of Elko, Nevada. The proposed transmission line would carry electricity produced at a to-be-constructed geothermal plant at Hot Creek on land owned by the Spanish Ranch. The transmission line and access road would be located on private and public lands in sagebrush and grassland dominated high desert. The transmission line crosses several creeks. The access road crosses just one creek, Harrington Creek, which, because of the associated wetlands, requires an Army Corps of Engineers Section 404 permit. The primary concern of the project and transmission line is negative impacts to sage grouse from noise, the presence of the poles and cables for the transmission line, and traffic along the access road. Disturbance caused by these activities may interrupt sage grouse lekking and brood rearing activities and will fragment what is considered to be high quality sage grouse habitat. The geothermal plant, which will produce about 18 megawatts of electricity for the nation's power grid, is part of a national priority to reduce dependence on fossil fuels. The priority is high enough that the US Department of Energy is proposing to guarantee the loans necessary to construct the geothermal plant and transmission line.

Intensity:

1) Impacts that may be both beneficial and adverse.

The construction and operation of the geothermal plant and transmission line would likely create negative impacts to sage grouse habitat for as long as the geothermal plant operates, (expected to be around 20 years) and for as long as the transmission line is present (the Right-of-Way grant would require removal of the transmission line as soon as the geothermal plant is permanently closed). These impacts include disturbance to lekking and brood-rearing activities from noise and traffic. The transmission line would cause avoidance of areas where the transmission line was present, at least in the short term, possibly provide perching locations for predators like raptors and corvids, and fragment habitat. On the other hand, the voluntary conservation fund, will be funded with more than \$600,000 in Ormat contributions will help rehabilitate wildfire damaged lands, by reseeding and other vegetation improvement actions, retrofit other existing transmission lines with anti-perching deterrents, and fund studies that may increase our understanding of how noise impacts sage grouse. The intensity of these impacts, but may be sufficient to cause abandonment of nearby leks and avoidance of some high-quality habitat.

2) The degree to which the proposed action affects public health or safety.

The proposed action would not be likely to affect public health or safety. However, it is possible that an accident at the plant could result in explosions and or fire from the pentane used to operate the plant. Such could be injurious or fatal to plant workers and could possibly spark a rangeland wildfire, although ground clearances requirements are intended to minimize the possibility of wildfires caused by the plant, either as a result of normal operations or as a result of accident. Pentane transported approximately once per year to replace lost pentane during plant operations from leakage could result in serious accidents, however, such transport is governed by federal and state regulations and is not unlike the daily transport of gasoline, propane, and similar fuels throughout Elko County.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are important cultural resources in the area which would be handled under the Section 106 process including a Memorandum of Agreement between BLM, the DOE, the Nevada SHPO, and the proponent, with the ACOE joining the agreement via an amendment. The proposed access road crosses Harrington Creek, which, because of its wetlands, requires a 404 Permit for the road. The area is also considered prime sage grouse habitat. Beyond these three issues, which are not particularly unique in themselves, there are no other unique characteristics affected by the proposed action.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

There are public and agency concerns about the impact on sage grouse. Although impacts are expected, measures have been built into the proposed action to reduce the impacts and to provide for beneficial impacts to sage grouse habitat elsewhere.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The proposed geothermal plant, transmission line, and access road are standard technology. There are no unique or unknown risks.

6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

This project, besides being possible only because there is a geothermal resource where the proposed power plant is to be located has been reviewed and analyzed under standard procedures, including the regulations for Rights-of-Way and the National Environmental Policy Act. There is nothing about the project or the procedures used that would imply a precedent of any kind.

7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

No significant cumulative impacts have been identified in the EA. The voluntary conservation fund for sage grouse that will be established by Ormat will fund a number of projects including wildfire revegetation, transmission line retrofits and other actions to benefit wildlife, especially sage grouse.

8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.*

Cultural sites eligible for listing in the National Register of Historic Places (NRHP) were identified in the project area and EA and will be impacted by the construction of the power plant and transmission line. The sites will be treated in accordance with the Memorandum of Understanding prepared under the Section 106 guidelines.

9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.*

The project will not affect a listed species or its habitat. However, the project will impact sage grouse, a “warranted but precluded” species. Although measures have been incorporated into the project design to reduce impacts to sage grouse, abandonment of one or more sage grouse leks, and avoidance of some prime habitat areas may occur as a result of the implementation of the proposed action. The establishment of the voluntary conservation fund is expected to offset negative impacts by funding the rehabilitation of sage grouse habitat impacted by wildfire, and retrofitting existing power transmission lines with perch deterrents, and flight diverters. In addition, if monitoring of sage grouse leks near the plant show a decline in lek attendance of 50% for two years, part of the overhead transmission line will be removed and replaced by an underground line.

10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action will not violate or threaten to violate any Federal, State, or local law or requirement imposed for the protection of the environment.

//Signed//

David Overcast, Field Manager

Date